



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/696,498

10/30/2003

Renzo Colle

34874-374/2002P10209US02

5722

64280

7590

06/11/2008

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C.

ATTN: PATENT INTAKE CUSTOMER NO. 64280

ONE FINANCIAL CENTER

BOSTON, MA 02111

EXAMINER

KARDOS, NEIL R

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

06/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,498	Applicant(s) COLLE ET AL.	
	Examiner Neil R. Kardos	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-17,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-17,29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a **FINAL** Office action on the merits.

Claims 1 and 4-17 have been amended.

Claims 2-3 and 18-28 have been cancelled.

Claims 29-30 have been added.

Currently, claims 1, 4-17, and 29-30 are pending and have been examined.

Response to Amendment

2. Applicant's amendments to claims 1 and 4-17 and cancellation of claims 2-3 and 18-28 are sufficient to overcome the 35 U.S.C. § 101 rejection set forth in paragraph(s) 3 of the previous office action.

Response to Arguments

3. Applicant's arguments filed March 11, 2008 have been fully considered but they are not persuasive.
4. Applicant argues that the combination of Srimuang with Mahapatro fails to disclose or suggest that non-resource constraint data is obtained by polling a remote computer separate from the first repository as recited. Examiner respectfully disagrees.
5. In figure 1, Srimuang depicts obtaining information from a remote computer. Items 110-114 are customer computers from which scheduling requests can be obtained (see paragraph 105). Items 150-156 are vendor computers containing vendor resource information (see paragraph 81-83). Mahapatro also discloses obtaining information from a remote computer (see

Art Unit: 3623

figure 1: item 11). Furthermore, Mahapatro discloses that a user can input deadline information for a scheduling request (see column 12). Thus, a server of Srimuang (item 104) can obtain Mahapatro's deadline (non-resource) constraints from Srimuang's customer computer (items 110-114) (see 103 rejection below as to why this would be obvious). Srimuang's server (item 104) also obtains resource information (see at least paragraph 105) from a vendor computer (items 150-156). Therefore, the combination of Srimuang and Mahapatro teaches that resource and non-resource information is obtained from separate repositories on remote computer systems.

6. Examiner also notes that even if the resource and non-resource information were obtained from the same data repository, it is well within the skill level of one of ordinary skill in the art to separate data into different databases in order to organize information and streamline data collection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. pre-grant publication number 2003/0061087 to Srimuang ("Srimuang") in view of U.S. patent number 6,571,215 to Mahapatro ("Mahapatro").**

Claim 1: Srimuang discloses a computer-implemented method comprising:

- associating, based on user input, resource information with task items that need to be completed as part of performing a service action by an engine (see paragraphs 10, 13, and 110, disclosing scheduling an appointment based on availability of required personnel, consumable resources, and non-consumable resources; paragraph 98-99, disclosing allowing users to schedule appointments based on available resources; figure 1, depicting schedule databases and availability checking; paragraphs 72, 79-81); and
- polling a first repository of resource information associable with the task items, the repository including human resource information, reusable resource information, and non-reusable resource information (see id.), wherein:
- the human resource information includes availability information for human resources (see id.),
- the reusable resource information includes availability information for reusable resources (see id.),
- the non-reusable resource information includes availability information for non-reusable resources (see id.);
- scheduling the resources needed to perform the service action (see id.).

Srimuang does not explicitly disclose:

- polling a remote computer system different than the first repository to obtain non-resource constraint information for the service action; and

- scheduling resources needed to perform the service action based on results obtained from the repository of resource information as limited by the non-resource constraint information obtained from the remote computer system.

However, Srimuang does disclose retrieving information from a remote computer (see figure 1 and paragraphs 68-70).

Mahapatro discloses using non-resource constraint information for a service action (see column 12: lines 13-27; column 12: table 1, disclosing including deadlines as a constraint). Mahapatro also teaches retrieving information from a remote computer (figure 1: item 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain the non-resource constraint information taught by Mahapatro from a remote computer in order to schedule services according to the method disclosed by Srimuang. One of ordinary skill in the art would have been motivated to do so for the benefit of increased efficiency and accuracy in meeting customer demands on time (see column 5: lines 5-24). Also, using a remote computer to obtain this information is a known element in the prior art that produces a predictable result (e.g. a successful transmittal from one computer to another).

Claim 4: Srimuang and Mahapatro do not explicitly disclose wherein the non-resource constraint information comprises information about contractual requirements.

Mahapatro, however, teaches including non-resource constraints in task scheduling. Furthermore, Mahapatro teaches constraints that are commonly associated with contractual requirements, such as start dates, end dates, priorities, and specific resource assignments (see column 12: table 1).

Examiner takes Official Notice that it would have been obvious to one in the scheduling arts to retrieve the constraints taught by Mahapatro from a contract and incorporate them into the invention disclosed by Srimuang. One of ordinary skill in the art would have been motivated to do so for the benefit of increased efficiency and accuracy in meeting customer demands (see Mahapatro column 5: lines 5-24).

Claims 5-6: Srimuang discloses wherein the availability information for human resources comprises availability information for individuals and for groups of individuals (see paragraph 56).

Claim 7: Srimuang discloses wherein the availability information for reusable resources comprises availability information for tools (see paragraph 56, disclosing wherein the reusable resource is an object, such as a dentist's chair; paragraph 92, disclosing wherein the reusable resource is a card deck, which is a tool for playing a card game).

Claim 8: Srimuang discloses wherein the availability information for reusable resources comprises availability information for work areas (see paragraph 56, disclosing wherein the reusable resource is a location, such as a conference room; paragraph 110, disclosing wherein the reusable resource is an examination room).

Claim 9: Srimuang discloses wherein the availability information for non-reusable resources comprises availability information for spare parts (see paragraph 10, disclosing wherein the non-reusable resource is shampoo, motor oil, or tongue depressors; paragraph 56).

Claim 10: Srimuang discloses wherein:

- the task items include a human resource skill requirement (see paragraph 13, disclosing scheduling nurses and doctors),

- the human resource information includes a indication of a skill possessed by particular human resources that are represented in the human resource information (see id.), and
- the engine associates a particular human resource with a particular task item only when the indication of the skill possessed by the particular human resource matches the human resource skill requirement of the task item (see id.; paragraphs 10 and 110, disclosing scheduling an appointment based on availability of different personnel, consumable resources, and non-consumable resources).

Claim 11: Srimuang discloses wherein:

- the task items include a tool characteristic (see paragraph 13, disclosing scheduling examination rooms and x-ray rooms),
- the reusable resource information includes an indication of a tool characteristic for particular tools that are represented in the reusable resource information (see id.), and
- the engine associates a particular tool with a particular task item only when the indication of the tool characteristic for a particular tool matches the tool characteristic of the task item (see id.; paragraphs 10 and 110, disclosing scheduling an appointment based on availability of different personnel, consumable resources, and non-consumable resources).

Claims 12-14: Srimuang discloses wherein the availability information for human resources, reusable resources, and non-reusable resources is provided to the repository of resource information from a computer system other than the computer system for scheduling

resources (see figure 1, depicting vendors and customers that provide availability information over a network to scheduling server 104; paragraphs 68-69, disclosing scheduling software divided among a plurality of servers; paragraphs 81-83).

Claim 15: Srimuang discloses wherein the engine and the repository of resource information are capable of communicating using a network with mobile clients (see figure 1, depicting engine and repository in scheduling server 104 communicating via the internet 102 with mobile clients 106-114).

Claim 16: Srimuang discloses wherein the engine is configured to send, to each mobile client, resource information associated with task items that need to be completed as part of performing a particular service action (see paragraph 95, disclosing wherein a customer can view an employee's availability).

Claim 17: Srimuang discloses wherein the engine is configured to receive, from each mobile client, user input for the purpose of associating resource information with a particular task item (see paragraphs 98, 104-106, and 110, disclosing wherein a customer can make an appointment that affects the availability of a resource).

9. **Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent number 7,174,303 to Glazer et al ("Glazer") in view of U.S. pre-grant publication number 2003/0036925 to Miller ("Miller").**

Claim 29: Glazer discloses a computer-implemented method comprising:

- receiving a request to schedule a service request (see column 2: lines 51-58; column 3: lines 59-66);

- polling a first repository to associate each task with at least one of a person, a non-reusable resource, and a reusable resource (see column 3: line 66 through column 4: line 9);
- determining whether there are any non-resource constraints limiting when the service order can be scheduled (see column 3: lines 53-55);
- determining a time slot within a time range defined by the non-resource constraints in which the associated persons, non-reusable resources, and reusable resources are also available (see column 3: line 66 through column 4: line 9; figure 2); and
- scheduling the service order during the time slot (see column 4: lines 31-33).

Glazer does not explicitly disclose polling a second repository remote from the first repository for non-resource constraints.

Examiner takes Official Notice that it was well-known in the computing arts at the time the invention was made to retrieve information from a remote computer (e.g. from a server or over the internet).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain the non-resource constraint information disclosed by Glazer from a remote computer according to well-known computing methods. This combination of known elements produces a result that would be predictable to one of ordinary skill in the art (e.g. transmission of data from one computer to another).

Glazer also does not explicitly disclose wherein the service request comprises a plurality of tasks.

Miller discloses this limitation, including assigning resources to each individual task of a service request (see at least paragraphs 3-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Glazer's method of assigning resources and scheduling for a service request to the individual task items of that service request as taught by Miller. This combination of known elements produces a result that would be predictable to one of ordinary skill in the art (e.g. assigning resources to multiple tasks that make up a service order).

Claim 30: Glazer does not explicitly disclose the limitations of this claim.

Miller discloses:

- rendering, on a client computer, a graphical user interface, the graphical user interface presenting a user with a generic service order template for a service requested by the service request, the generic service order template comprising a collection of reusable data that identifies each of the tasks to be performed for the service requests, and for each task, a predetermined, expected duration of the task and an identification of other tasks on which the tasks depends (see figures 3-4; paragraphs 44-51);
- receiving user-generated input modifying the generic service order template (see figures 3-4); and
- initiating the scheduling of the service request based on the modified generic service order template (see paragraph 44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the service order templates taught by Miller to schedule a service as disclosed

Art Unit: 3623

by Glazer. One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies gained by streamlining the process of filling out an order form (see Miller: paragraphs 7-8).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. pre-grant publication number 2003/0126141 to Hassman et al, directed to managing and resourcing persons, skill sets, and project requirements.
- U.S. pre-grant publication number 2005/0015504 to Dorne et al, directed to resource management.
- U.S. pre-grant publication number 2004/0138939 to Theiler, directed to managing workflow.
- U.S. pre-grant publication number 2004/0162811 to Wetzter et al, directed to planning, scheduling, and allocating MRO resources.
- U.S. patent number 7,035,808 to Ford, directed to arranging and selecting resources for work items.
- U.S. patent number 5,630,070 to Dietrich et al, directed to optimizing manufacturing resource planning.
- U.S. pre-grant publication number 2001/0027481 to Whyel, directed to appointment/reservation scheduling.
- U.S. pre-grant publication number 2003/0216945 to Dvorak et al, directed to analyzing and responding to orders.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos
Examiner
Art Unit 3623

NRK
6/4/08

/Romain Jeanty/
Primary Examiner, Art Unit 3623